

Transparency Tube Transparency Protocol

(for shallow or flowing waters)

Field Guide

Task

Measure the transparency of your water sample.

What You Need

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| <input type="checkbox"/> <i>Hydrology Investigation Data Sheet</i> | <input type="checkbox"/> Cup for pouring water into the tube |
| <input type="checkbox"/> <i>Collecting Your Water Sample in a Bucket Field Guide</i> | <input type="checkbox"/> Latex gloves |
| <input type="checkbox"/> <i>Cloud Cover Protocol Field Guide</i> | <input type="checkbox"/> Pen or pencil |
| <input type="checkbox"/> Transparency tube | |

In the Field

1. Fill in the top portion of the *Hydrology Investigation Data Sheet*.
2. Record the cloud cover. See *Cloud Cover Protocol Field Guide* from *Atmosphere Investigation*.
3. Put on gloves. Collect a surface water sample. See *Collecting Your Water Sample in a Bucket Field Guide*.
4. Stand with your back to the sun so that the transparency tube is shaded.
5. Pour sample water slowly into the tube using the cup. Look straight down into the tube with your eye close to the tube opening. Stop adding water when you cannot see the pattern at the bottom of the tube.
6. Rotate the tube slowly as you look to make sure you cannot see any of the pattern.
7. Record the depth of water in the tube on your *Hydrology Investigation Data Sheet* to the nearest cm. **Note:** If you can still see the disk on the bottom of the tube after the tube is filled, record the depth as >120 cm.
8. Pour the water from the tube back into the sample bucket or mix up the remaining sample.
9. Repeat the measurement two more times with different observers using the same sample water.